

DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN
COLEOPTERA. PART xiv.

By ARTHUR M. LEA, F.E.S.

LUCANIDÆ.

LISSOTES GRAMMICUS, n.sp.

♂. Black, shining; parts of appendages obscurely diluted with red. Sides and undersurface very sparsely clothed, the legs moderately setose.

Head gently and almost evenly convex, a fairly large notch on each side, front incurved to middle and almost impunctate; with large, round, dense punctures at sides and about eyes, becoming smaller towards middle of base. Mandibles not very large and almost simple. Eyes small, round, completely enclosed, and four in number, the lower ones slightly smaller than the others. Antennæ with three apical joints moderately large, the apical one truncated. *Prothorax* with sides and base margined, sides lightly sinuous, dilated to near apex; with large, round, dense punctures on sides, becoming smaller towards middle, the middle itself almost impunctate and evenly convex. *Elytra* scarcely longer than head (including mandibles) and prothorax combined; each with four, rather wide, shining, impunctate lines from base to beyond the middle, elsewhere with crowded and comparatively small punctures, but a few larger ones at sides of the smooth lines. Front *tibiae* with two, strong, obtuse, apical teeth, and three smaller and still more obtuse ones. Length, 16 mm.

Hab.—New South Wales: Bodalla (Dr. R. H. Pulleine). Unique.

No other Australian species of *Lissotes*, except *L. luteus* (which by the figure looks like a *Lissotes*, and was doubtfully referred by Westwood to *Dorcus*; it was omitted from Masters' Catalogue), has been described as having four eyes; Westwood regarded the

type of that species as a male, despite the feminine appearance of the mandibles; but it was described and figured as having six impressed striæ on each elytron; on the present species there are no striæ, their places being taken by smooth, shining lines not interrupting the general convexity; there are also many other differences in the head, antennæ, etc. On account of its eyes, the species should perhaps have been referred to *Lissapterus* (*howittianus* of that genus has sometimes been referred to *Lissotes*), but the head and mandibles are very different from those of the species at present referred to that genus. The mandibles of the type are touching at their tips, and enclose a top-shaped space; each has an obtuse swelling about the middle of the upper surface, and is obtusely bicuspidate at the apex.

SCARABÆIDÆ.

LIPARETRUS MAJORINUS, n.sp.

Black, shining; elytra and appendages reddish-castaneous. Front of head, pronotum (including disc), and elytra at base and near suture, with rather long, erect, and rather sparse whitish hair; undersurface, hind-parts, and legs with dense clothing.

Head with crowded (but not confluent) and not very large punctures, becoming larger and sparser on clypeus, sides of the latter conspicuously narrowed and sinuous to apex, which is evenly and moderately incurved to middle. Antennæ nine-jointed. *Prothorax* with strongly rounded sides, hind angles rounded off, front ones produced and acute, median line vague and traceable only towards base; punctures of somewhat uneven size, but mostly rather large, and not very crowded. *Elytra* with punctures moderately large, becoming smaller and more crowded posteriorly, geminate striæ feebly defined. *Hind-parts* with rather dense punctures, smaller and denser on propygidium than on pygidium. Front *tibiæ* strongly and obtusely tridentate; hind tarsi with basal joint distinctly shorter than second. Length, 9 mm.

Hab.—Queensland (unique).

The erect pilosity is continued on to the elytra from the pronotum, but is not very dense there; regarding the species, how-

ever, as belonging to Group 1, of Blackburn's Table,* it would be associated with *L. fulvohirtus*, from which it differs in being larger, with the prothoracic punctures considerably larger, and the surface more shining; regarding it as belonging to Group 2, it would not fit into either F or FF, as the clypeus is neither truncate nor rounded in front. It is larger than any previously described black species with red elytra from Queensland. Some parts of the pronotum are very obscurely diluted with red; the elytra of the type are without a membranous fringe.

LIPARETRUS ACUTANGULUS, n.sp.

♂. Black; elytra (base narrowly black), hind-parts and appendages (most of femora excepted) bright reddish-castaneous. Undersurface and legs with long, pale hair, a fringe of similar hair on each side of prothorax, but becoming darker in front, rest of upper surface glabrous.

Head with rather small and crowded, but not confluent punctures, becoming larger and less crowded on clypeus; sides of clypeus lightly elevated and strongly narrowed, apex strongly elevated, lightly emarginate and acutely produced at sides. Antennæ nine-jointed. *Prothorax* with sides strongly rounded, hind angles widely rounded off, front ones acute and produced, median line very feeble; with dense and sharply defined but rather small punctures, less numerous along middle than elsewhere. *Elytra* with fairly large punctures, becoming crowded towards sides and smaller posteriorly; geminate-striæ well-defined. *Hind-parts* with punctures as on pronotum. Front *tibiae* strongly but obtusely tridentate; front tarsi rather thick, basal joint keeled internally, claws thickened at base; hind tarsi with first joint conspicuously shorter than second. Length, 7-7½ mm.

♀. Differs in having the clypeus short, truncate in front, with the sides not produced, abdomen more convex, legs shorter, and front tarsi thinner.

Hab.—Queensland: Brisbane (T. McGregor).

Belongs to Blackburn's Group 4, and there would be referred to JJ, but the median line of the pronotum, although fairly

* Trans. Roy. Soc. S. Aust. 1905, pp.287-296.

distinct, is feeble even at the base; but regarding it as belonging to K, it would be associated with *L. incertus*, from which it differs in the acutangular clypeus of the male, larger punctures of pronotum, and glabrous hind-parts; if referred to KK, it would be readily distinguished from *L. vicarius* by the clypeus. Its front tarsi and clypeus are much as in *L. phœnicopterus*, of Group I (with which it would be associated in Macleay's system), but which has very different clothing. On the male, the club is slightly infuscated; on the female, it is no darker than the rest of the antennæ; on the female also, the whole of the abdomen and legs are reddish; on the male, many of the elytral punctures are transversely confluent towards the sides, but, on the female, this appearance is less evident. On both specimens, there are a few hairs at the tip of the pygidium, but, except for these, the hind parts are quite glabrous; both specimens are without a membrane at the apex of the elytra.

LIPARETRUS MIXTUS, n.sp.

♂. Black; elytra and appendages (parts of the legs deeply infuscated) bright castaneous. Undersurface with long, pale hairs, a fringe of similar (but darker) hair on each side of pronotum; hind-parts with short, dense, erect setæ in addition to long hair.

Head with rather small, crowded, and more or less transversely-confluent punctures, becoming sparser, non-confluent, and slightly larger on clypeus; clypeus with sides moderately elevated, strongly decreasing and incurved to apex, apex rather strongly but obtusely tridentate. Antennæ nine-jointed. *Prothorax* with sides rounded and rather strongly produced towards base, hind angles widely rounded off, front ones slightly produced and somewhat acute, median line feeble; punctures small and rather sparse, but more numerous towards sides and front angles. *Elytra* with punctures of moderate size and not very numerous; geminate-striæ fairly well-defined. *Hind-parts* with dense subasperate punctures of moderate size. Front *tibiæ* strongly and acutely tridentate; basal joint of hind tarsi slightly shorter than second. Length, 6 mm.

Hab.—New South Wales (unique).

At first glance, the second joint of the hind tarsi appears to be distinctly longer than the first, but in reality it is very little longer. Regarding the species as belonging to Blackburn's Group 4, it would be associated with *L. distans*, which is a much larger species with all parts more or less reddish; if not to Group 4, it could only be referred to Group 7, and there associated with *L. iridipennis*, from which it differs in its bright red elytra and clothing of hind parts (the setæ of these are very short and partially concealed by the hairs, but they are very distinct from the sides); each lateral fringe of the pronotum is partly pale and partly dark, and although Blackburn tabulated *L. iridipennis* as having the fringe whitish, it is almost as often dark or partly dark as whitish; at first glance, it appears to be close to *L. perkinsi* of Group 10, but the clypeus has less acutely projecting teeth (the type is certainly a male), and the hind parts are densely clothed; *L. bituberculatus* (also of Group 10) also differs in the hind parts and in the considerably longer basal joint of hind tarsi. Most of the upper surface is brightly iridescent; the femora are almost black; the elytra (of the type) are without an apical membrane.

LIPARETRUS INTERMEDIUS, n.sp.

♂. Black; elytra (except for a narrow space at base), most of tarsi, parts of front tibiæ, antennæ and tarsi, more or less castaneous. With long hair on most parts, but elytra glabrous.

Head with crowded and small punctures, but a few of larger size scattered about; clypeus with sparser punctures than between eyes, and smaller than the large ones there; sides moderately elevated and decreasing (with curved outlines) to apex, which is strongly but obtusely tridentate. Antennæ nine-jointed. *Prothorax* with sides strongly rounded, hind angles widely rounded off, front ones subacute and scarcely separately produced; with comparatively large and not very dense punctures, mixed with smaller ones; median line represented by a feeble basal depression only. *Elytra* with not very dense punctures, no larger than the larger ones on pronotum, and becoming smaller and more crowded on sides; geminate-striæ fairly well-defined. *Hind-parts* with

rather dense punctures, slightly larger on pygidium (where they are as large as on pronotum) than on propygidium. Front *tibiae* strongly tridentate; basal joint of hind tarsi distinctly longer than second. Length, 7 mm.

Hab.—Queensland: Cumnamulla (H. Hardcastle); unique.

Belongs to Group 8, of Blackburn's Table, but could hardly be associated with *L. tridentatus*, as the clypeal teeth are much less acute and less produced; it differs from that species also in the clothing of the pronotum being quite as dense at the base as in front, and in the clothing of the pygidium; the punctures of the pronotum are also sparser and considerably larger. The clothing of the head and base of prothorax is much paler than on most of the prothorax, where it is black or blackish (it is uniformly coloured on *L. parvidens* and *L. obtusidens*); from *L. parvidens* it differs also in having the clypeus more conspicuously tridentate (both sexes of that species are before me), and from *L. obtusidens* in having rather larger punctures (on the elytra as well as on other parts). The antennæ are paler than the other reddish parts, but the outer parts of the club are lightly infuscated. The elytra are terminated by an extremely short membrane.

LIPARETRUS QUINQUELOBATUS, n.sp.

♂. Black; elytra, antennæ and palpi bright flavo-castaneous, legs of a darker red. Sterna with rather long pale hair, abdomen sparsely clothed, clypeus with a few hairs, a pale fringe on each side of pronotum, and extended on to sides of front margin, rest of upper surface glabrous.

Head with crowded and small, non-confluent punctures, an irregular row of larger ones near clypeal suture; clypeus with sparser and larger punctures than between eyes, sides strongly narrowed and suddenly incurved near apex, which is strongly and acutely tridentate. Antennæ nine-jointed. *Prothorax* with sides strongly rounded, hind angles widely rounded off, the front ones acute, median line shallow; with dense and sharply defined but rather small punctures. *Elytra* with rather sparse punctures of moderate size, becoming smaller and denser at the sides and apex; geminate-striæ well-defined, apical membrane narrow

but conspicuous. *Hind-parts* with dense punctures, much as on pronotum, but a few of larger size scattered about. Front *tibiae* strongly but obtusely tridentate; basal joint of hind tarsi conspicuously longer than second. Length, 8-8 $\frac{1}{4}$ mm.

Hab.—Queensland : Cloncurry (H. Hacker).

In Blackburn's Table, would be associated with *L. perkinsi*, but differs from that species in being much larger, non-iridescent, prothoracic punctures considerably larger and more sharply defined, and elytral punctures larger. *L. tridentatus*, which has a somewhat similar clypeus and is similarly coloured, has the front half of the pronotum densely clothed; from *L. intermedius*, it differs in being larger, clypeus strongly incurved before the apical teeth, prothorax glabrous on disc, and with smaller and much denser punctures, elytra entirely pale, etc. The clypeus is conspicuously tridentate in front, but the sides near the apex are strongly incurved, so that, when viewed obliquely from behind, it appears to consist of five almost equal lobes; immediately behind its suture, the surface is shining and sparsely punctate, with large punctures marking the position where the sparse and dense punctures meet. On the two specimens before me, the hind parts are entirely glabrous, except for a few hairs on the pygidium.

HAPLONYCHA COLOSSA, n.sp.

Bright reddish-castaneous, elytra paler. Undersurface and legs with dense, golden hairs, a few similar hairs at sides of eyes, and forming a thin row in each lateral gutter of pronotum; membranous fringes of elytra very short; pygidium glabrous.

Head with rather small but sharply defined punctures, becoming somewhat larger and more numerous (but not confluent) about clypeal suture; front face of clypeus with numerous setiferous punctures on sides, but setæ confined to a single row across middle. Antennæ with fourth joint slightly longer than third, the five following joints forming a club. Maxillary palpi rather long, penultimate joint slightly longer than antepenultimate, and scarcely shorter than apical. *Prothorax* more than thrice as wide as long, sides rather strongly rounded and feebly arcuate to base and apex, front angles somewhat produced, hind

ones obtuse and not completely rounded off; with rather small but distinct punctures, sparser in middle than elsewhere. *Elytra* moderately dilated to about the middle; punctures fairly numerous, except between the geminate striae (these very close together); suture very feebly mucronate. *Pygidium* shining, lightly convex; with rather small, scattered punctures. Basal joint of hind *tarsi* distinctly shorter than second. Length, 32 mm.

Hab.—Western Australia.

I have had the type for many years under the name of *H. gigantea*, but although looking like a large specimen of that species, it may be at once distinguished by the maxillary palpi: on *H. gigantea*, the antepenultimate joint is slightly longer than the penultimate, hence Blackburn referred it to his Group 5. On the present species, the penultimate is slightly the longer, hence the species must be referred to CC, of his Group 4, and there associated with *H. nobilis*, from which it differs in having the prothorax more transverse, and the fifth joint of the antennae (instead of the sixth) the first of the club. The rami of the club are decidedly long, but as that of its first joint is only about half the length of the second, the type appears to be a male. From some directions, the pronotum appears to have a fine, iridescent bloom.

NOVAPUS PARVUS, n.sp.

♂. Reddish-brown, head and parts of legs black. Under-surface, legs, and upper part of pygidium with dense, rusty-red hair, upper surface glabrous.

Head with crowded and irregular punctures; with a sharp, short, oblique, simple horn. Antennae ten-, club three-jointed. *Prothorax* about one-fourth wider than long, hind angles rounded off, front ones produced and acute, with a large discal excavation, its front part with transverse sculpture; with punctures of moderate size, but very irregularly distributed. *Elytra* with sutural and lateral striae well-defined, but the others represented by feeble depressions or oblique scratches; punctures small and sparse, but becoming numerous at apex and sides. *Pygidium* with numerous rather small punctures, becoming larger and crowded at base. Length, 15 mm.

Hab.—Western Australia: Swan River (A. M. Lea); unique.

Much smaller than any previously described species, with the prothoracic excavation unusually small and shallow (it scarcely occupies one-third of the width of the prothorax), and the cephalic horn very small and simple (scarcely half the length of that of *N. simplex*). At first glance, the type bears a strong superficial resemblance to the males of *Isodon pecuarius*, but the horn is on the head, not on the prothorax.

CRYPTODUS ABERRANS, n.sp.

Black, not very highly polished (the elytra subopaque), parts of undersurface and of legs obscurely diluted with red, club of antennæ paler. Upper surface almost glabrous, undersurface sparsely and irregularly clothed, pygidium with a few short setæ.

Head with rather large but not very dense punctures; clypeus with front margin rather strongly elevated and truncate, lateral margins lightly elevated and oblique, suture well defined towards sides but obsolete in middle, where the surface is slightly elevated; mentum large, with large, shallow punctures, depressed in front, base rather lightly notched, with a few setæ and long bristles. Antennæ apparently nine-jointed, club three-jointed. *Prothorax* rather strongly convex, about once and one-half as wide as long, sides strongly rounded, base bisinuate, front angles obtusely produced, the hind ones rounded off, median line rather vague; with fairly large but nowhere crowded punctures. *Elytra* at base the width of prothorax, slightly dilated to beyond the middle; surface finely shagreened, with well-defined rows of fairly large punctures towards suture, but becoming smaller and irregular towards side and apex. *Pygidium* with fairly large but rather shallow punctures. Four hind *tibiæ* strongly serrate or digitate at apex, each notch with a seta; front claws simple. Length, 11 mm.

Hab.—Northern Territory: Darwin (N. Davies); unique.

In its comparatively small size, convex body, and general appearance, the present species certainly does not look a *Cryptodus*;^{*} but the wide mentum concealing all the mouth-parts

^{*} Neither does *C. grossipes*, at first glance, appear to belong to the genus, but its remarkable mentum is almost exactly as in *C. cariceps*, which is quite an ordinary species of *Cryptodus*.

is like that of *Cryptodus*, and utterly different from that of any other Australian genus of *Dynastides*: the projection in front of the prosternum, and the triangularly dilated basal joint of the antennæ are also as in *Cryptodus*; the four hind-tibiæ are digitate instead of truncate at apex, and are certainly not fringed with setæ (as on normal *Dynastides*), but, at the base of each notch, there is a seta; smaller and less distinct setæ, however, are present on several other species of *Cryptodus* (e.g., *C. tasmanianus*), although they need to be closely looked for. The base of the mentum is less deeply notched than is usual in those having it notched, in this respect agreeing with *C. gigas*; in *C. tasmanianus*, it is truncate; and, in *C. cariceps* and *C. grossipes*, it has a long and almost vertical process; the apex of the basal joint of antennæ is less conspicuously produced over the following joints than is usual in the genus, but, from some directions, it entirely conceals the two following joints. The elytra, at first glance, appear to be glabrous, but, on close examination, some very fine setæ become visible; there are three or four interstices on each elytron slightly more prominent than the others, but not one is conspicuously elevated. The sex of the type is doubtful, as many males of *Cryptodus* have the front claws simple.

CORYNOPHYLLUS INTEROCULARIS, n.sp.

♂. Black; antennæ, most of legs and of undersurface more or less castaneous-brown. Undersurface and legs with rather dense, rusty-red hair; upper surface and pygidium glabrous.

Head concave, and with irregular (but not very dense) transversely-confluent punctures between eyes; clypeus moderately long, punctures more or less confluent, apex and sides rather strongly elevated, basal carina strongly elevated (sub-tuberculate) in middle; mentum gently convex. Antennæ ten-, club three-jointed, rami large, about as long as head is wide. *Prothorax* not twice as wide as long, sides strongly rounded, apex bisinuate, front angles produced, hind ones rounded off, a rather small excavation in front, the middle of its front margin with a small tubercle, basal gutter distinct at sides, but not traceable across middle; with small and sparse punctures, becoming more numer-

ous on sides and larger in excavation. *Elytra* the width of prothorax; with irregular rows of large punctures in distinct striæ, but becoming very irregular about apex. *Pygidium* with varicose punctures, almost absent along middle, but crowded in upper corners. Spurs of hind *tibiæ* stout, and very unequal. Length, $15\frac{1}{2}$ -17 mm.

Hab.—New South Wales (Dr. E. W. Ferguson), Jenolan (J. C. Wiburd).

With the general outlines of *C. modestus*, but elytra dark and club of antennæ considerably smaller than in the male (although much larger than in the female); from the dark form of *C. fortunei*, it is at once distinguished by the very different clypeus and single cephalic elevation; *C. andersoni* has the clypeus different, and the club much larger. One of the specimens before me has the upper surface entirely deep black, but, on the other, it is obscurely diluted with red; on the latter specimen, the clypeus is distinctly bilobed in front, but, on the other, it is almost simple there. Some of the elytral striæ are irregularly geminate in arrangement.

EUCNEMIDÆ.

MICRORHAGUS RUFICOLLIS, n.sp.

Black; prothorax and legs red, tarsi paler, antennæ dull piceous-brown, the two basal joints somewhat brighter. Somewhat irregularly clothed with depressed, more or less stramineous pubescence.

Head with dense, partially concealed punctures; with a fine transverse carina near the base, and a very feeble longitudinal one near each eye; these large and prominent. Antennæ long and thin, second joint very short, third slightly shorter than first, and slightly longer than fourth, fourth to sixth somewhat wider than the others, fourth to tenth slightly produced on one side at apex, eleventh very thin, and conspicuously longer than tenth. *Prothorax* at base almost twice as wide as the median length, front angles rounded, hind ones strongly produced and acutely carinated; front margin carinated, the carina on each side with a short spur extended towards but not meeting the one

on the basal angle; with a vaguely impressed median line, becoming carinated at base; punctures moderately dense. *Elytra* parallel-sided from near shoulders almost to apex; with punctures of moderate size about base, becoming smaller posteriorly, but about tip decidedly coarse. Length, $3\frac{1}{4}$ mm.

Hab.—N.S.W.: National Park (A. M. Lea); unique.

The second joint of antennæ has a curious appearance as of being forced out of alignment. The elytral punctures are more or less lineate in arrangement, but not placed in striae, the sutural stria (and that only from about the middle) is the only distinct one on each elytron; elsewhere there are but vague remnants of striation, or none at all. The prosternal sulci are deep, parallel-sided to near the base, and somewhat narrower than the propleural parallelograms, which are about once and one-half as long as their basal width.

HEMIOPSIDA LONGICORNIS, n.sp.

Dull castaneous-brown; head, basal joint of antennæ, junction of prothorax and elytra, sterna, and hind coxæ, black or blackish. Rather densely clothed with moderately long, stramineous pubescence.

Head densely granulate-punctate; with a subfoveate impression between antennary sockets; clypeus widely depressed in middle. Antennæ long, slightly passing elytra, second joint very short, third slightly longer than first and distinctly longer than fourth, fourth slightly shorter than fifth, fifth-tenth subequal in length, eleventh almost as long as ninth and tenth combined. *Prothorax* strongly convex, front angles rounded, hind ones acute and obliquely produced on to shoulders, with a very feeble median line; with dense, rugose punctures. *Elytra* slightly wider than hind angles of prothorax, parallel-sided to beyond the middle; with rather dense and irregular, but sharply defined punctures, becoming crowded about base; striation well-defined throughout, but especially on apical fifth. *Abdomen* with a deep, conspicuous, hairy depression on each side of middle, extending from tip of first segment to tip of fourth. Length, $6-6\frac{1}{2}$ mm.

Hab.—Queensland: Mount Tambourine (H. Hacker's No.895).

Readily distinguished from all other species, except *H. ventralis*, by the abdominal depressions; the antennæ are also of unusual length; *H. ventralis* has the abdominal depressions commencing nearer the base of the first segment, and not continued beyond the third, and its antennæ are shorter and more conspicuously (although not strongly) serrated.

DYSCOLOCERUS POROSUS, n.sp.

♂. Black; undersurface, antennæ, and legs obscurely reddish. With very short pubescence.

Head with crowded punctures, with a very feeble depression on clypeus. Antennæ rather stout, eight basal joints densely punctate, second joint slightly longer than fourth, third slightly longer than two following combined, fourth to eighth equal and strongly transverse, ninth about as long as three following joints combined, and conspicuously wider, slightly longer and wider than tenth and much shorter and distinctly wider than eleventh, three apical joints as long as the seven preceding combined. *Prothorax* with sides rather strongly rounded in front, hind angles acute, with the outer side of each somewhat oblique, median line rather shallow but well-defined; with crowded punctures of moderate size. *Elytra* parallel-sided to beyond the middle; punctures at base as on prothorax, becoming somewhat smaller, but almost as crowded posteriorly; striation well-defined throughout, becoming deep posteriorly. Length (♂♀), 7-11 mm.

♀. Differs in being slightly more robust, antennæ shorter, the three terminal joints distinctly shorter than the seven preceding combined, the ninth scarcely shorter than the eleventh, and the fourth-eighth not transverse.

Hab. N.S.W.: Forest Reefs.—W.A.: Swan River (A. M. Lea).

The antennæ and sterna are somewhat darker than the abdomen and legs, but no parts are conspicuously reddish; the front of the prothorax of several specimens is very obscurely diluted with red. The pubescence of the upper surface is black and very short, but on the head, and base and apex of prothorax, it becomes longer and greyish, on the undersurface it is uniformly pale. On one specimen, the head appears to have a feeble median

line, but it is quite absent from the five others before me. The Swan River specimen has the sterna and femora quite black. In some respects, the female is close to the description of *Lycan ater*, but the fourth joint of the antennæ is no shorter than the fifth, and the prothorax has a conspicuous median line. The types were taken *in cop*.

DYSLOCERUS RUBRIVENTRIS, n.sp.

♂. Black; abdomen and legs bright red, antennæ reddish, becoming darker towards base, with the basal joint black. Clothed with blackish and ashen pubescence, becoming paler and more uniform on the undersurface.

Antennæ with second joint slightly longer than fourth, third slightly longer than fourth and fifth combined, fourth-eighth subequal in length, ninth-eleventh as long as first seven combined, ninth slightly wider than the following ones, almost as long as the four preceding combined, about one-third longer than tenth, and about two-thirds the length of eleventh. Length, $5\frac{1}{2}$ -6 mm.

♀. Differs in having the fourth-eighth joints of antennæ slightly wider than long, the ninth-eleventh scarcely as long as the seven preceding combined, and the eleventh very little longer than the ninth.

Hab.—N.S.W.: Jenolan (J. C. Wiburd).

The description of the sculpture of the preceding species, except of the antennæ, applies exactly to the present species, but besides the conspicuously red abdomen (in striking contrast to the black sterna) it differs from that species in having the three terminal joints of antennæ longer (in both sexes) and the fourth-eighth joints of the antennæ of the male much less conspicuously transverse.

DICTYUCNEMIS, n.g.

Head moderately large, antennary sockets comparatively small and widely separated. Mandibles large, prominent, strongly curved, their hind outline straight. Antennæ thin and rather long. *Prothorax* moderately transverse, hind angles small, produced slightly outwards but not backwards, and not embracing the elytra. *Scutellum* subquadrate. *Elytra* strongly convex,

distinctly wider than elytra, parallel-sided to near apex, epipleural fold narrow but traceable almost to apex. *Prosternum* with propleural triangles each with a narrow carina internally, and a still finer one externally, the two touching the apex at a slight distance (about equal to the length of the second joint of antennæ) from each other. *Metasternum* with episterna narrow and parallel-sided. *Abdomen* with first segment at the side about as long as the fifth along middle. *Legs* rather long; inner half of hind coxæ moderately long (about half the length of second segment of abdomen), then strongly narrowed to sides; tarsi moderately long, second, third, and fourth joints of exactly the same shape but decreasing in size; claws each with an obtuse swelling at base.

The prothorax is very aberrant for the family, but the combination of entire absence of a visible labrum, mandibles closely applied to the breast and concealing the palpi within the buccal cavity, intercoxal process of prosternum narrow and received into a deep groove in the mesosternum, and abdomen with five segments, forbid its being placed in any other family. The face is vaguely suggestive of some females of the *Rhipidoceride*. In Blackburn's Table, the genus would be associated with *Lycaon* (= *Hemiopsida*), with some features of which it agrees, but the base of the prothorax is at once distinctive from that, as from all other Australian genera. There is nothing at all approaching it in the Plates accompanying Bonvouloir's monograph. The punctures of the head and prothorax are remarkable. The external face of the mandibles is densely punctate, the punctures (except towards the base) within a depression enclosed by shining carinæ, which meet near the tips.

DICTYUCNEMIS MIRUS, n.sp.

Blackish-brown, or castaneous-brown, appendages somewhat paler. With not very dense, and very short, whitish pubescence.

Head with large, shallow, net-like punctures, margined by fine carinæ, and with the inner part of each puncture flat and shagreened; antennary sockets almost as far apart as the length of the three basal joints of antennæ. Antennæ extending almost

to hind coxæ, first joint not carinated, and slightly longer than third, second about half the length of fourth, third about as long as fourth and fifth combined, fifth to tenth very feebly decreasing in length, eleventh slightly longer than tenth, and about the length of ninth. *Prothorax* truncate in front, front angles rather strongly rounded, sides thence feebly undulated to base, a transverse impression near base, marking off a wide and short median lobe, with vague remnants of a median line, and a vague foveate impression on each side of middle; punctures as on head. *Scutellum* with apical half polished and almost impunctate. *Elytra* about one-fourth wider than prothorax, and about five or six times as long; with numerous distinct punctures and small round granules, becoming more crowded about base; striation well defined. *Prosternum* with moderately large punctures, each with a central pit, on middle portion, the propleural triangles with punctures much as on upper surface, but less defined. Apical segment of *abdomen* with dense, asperate punctures, each side with a shallow depression. *Legs* densely asperate-punctate; first and fifth joints of tarsi of equal length, and each about as long as third and fourth combined. Length, 7-10 $\frac{1}{4}$ mm.

Hab.—W.A.: Mullewa (Miss J. F. May).

The two specimens taken by Miss May are evidently conspecific, but the larger one is much darker than the other, with some parts almost or quite black.

NEMATODINUS, n.g.

Head short, mandibles strongly sinuous posteriorly, antennary sockets short and widely separated. Antennæ short, first and third joints long. *Prothorax* subquadrate, entirely concealing head from above. *Scutellum* subquadrate. *Elytra* with an epipleural fold at apex, and with suture armed. *Prosternum* with a vague longitudinal impression towards each side, the impression bounded outwardly by a fine carina (representing the prosternal suture), then with a narrow, almost parallel-sided space between the carina and margin of pronotum (this represented by a thin but not continuous carina). *Metasternum* elongate; *episterna* very narrow. *Abdomen* evenly convex, apex evenly

rounded. *Legs* not very long; hind coxæ moderately long near where they touch, suddenly narrowed, and then almost parallel-sided to sides; tarsi thin, fourth joint very small and simple; claws thin, with a slight basal swelling.

The only species known has the top-heavy appearance of *Nematodes* and *Trigonopleurus*, but it differs strikingly from these genera in the prosternal sclerites, and in the tips of the abdomen and of the elytra. Although the prosternal sutures are not deeply impressed (they are, however, almost parallel with each other) as they are in *Microrhagus* and *Entomophthalmus*, the side-pieces may be regarded as propleural parallelograms, as in those genera; whilst, in *Nematodes* and *Trigonopleurus*, the side-pieces are decided triangles. In Blackburn's Table, the genus would be associated with *Hypocælus*, from which it is at once distinguished by the elytra. The only genus at all approaching it in the tips of the elytra is *Galba*, with which it has scarcely anything else in common. In catalogues, it may be placed near *Nematodes*.

NEMATODINUS ARMIPPENNIS, n.sp.

Of a dull castaneous brown, legs and antennæ somewhat paler. Moderately clothed with short, stramineous pubescence.

Head with crowded but not very large punctures. Antennæ not passing middle coxæ, second joint very short, third about as long as the three following combined, fourth slightly longer than wide, fourth-tenth subequal in length but feebly dilated till the tenth is feebly transverse, eleventh scarcely wider but distinctly longer than tenth. *Prothorax* about as long as wide, front straight across middle, with a fine marginal carina curved at each side, and then continued parallel with the prosternal suture till it obliquely diverges to margin the hind angle, with a feeble medio-basal carina, each side of base depressed; densely granulate-punctate. *Elytra* with outlines continuously parallel with those of prothorax to near the apex, with crowded granulate-punctures about base, somewhat sparser elsewhere; tips with an epipleural fold from about level with base of fifth segment of abdomen, densely granulate and each with an oblique projection at the suture; striation feeble.

Hab. — Queensland: Cape York (H. Elgner).—Northern Territory: Darwin (N. Davies).

Seen directly from behind, the tips of the elytra appear to enclose the tip of the abdomen, and each to have a short semi-upright process at the suture. On one specimen there is a conspicuous carina on the prosternum extending from the left eye to the middle of the intercoxal process, but it is accidental, as it is not represented on the right side, and is absent from two other specimens.

ARISOCEPHALUS, n.g.

Head wide, antennary sockets large and moderately close together, clypeus sinuous in front, its edge finely carinated. Antennæ variable. *Prothorax* moderately transverse, basal angles not very long but acutely carinated. *Elytra* subparallel-sided, with a wide epipleural enlargement from base to hind coxæ. *Prosternum* with a conspicuous carina marking the suture on each side from front coxa to level with middle of eye, propleural triangles bounded externally as well as internally by a conspicuous carina. *Metasternum* with episterna rather narrow and parallel-sided for some distance, but dilated posteriorly. *Abdomen* with fifth segment about as long as the two preceding combined. Hind *coxæ* (except for an incurvature at trochanters) almost parallel-sided from inner to outer margins; tarsi compressed, fourth joint small and feebly produced on lower surface, claws each with an obtuse basal swelling.

In Blackburn's Table, this genus would be associated with *Microhagus* and *Entomophthalmus*, but the propleural triangles (instead of parallelograms) and prosternal sutures not sulcate, make it certain that the genus is not even close to these. The tricarinated clypeus of two of the species is suggestive of affinity with *Arisus*, but that genus has prosternal lateral sulci, and metasternal sulci; the general outlines, however, and especially the head, are much the same. The propleural triangles are without the least traces of longitudinal sulci, but are gently concave, or flat throughout; the carina marking the prosternal suture touches the front margin inwards of the point where the marginal carina touches it, instead of meeting it there as on most

genera of the family; in consequence, the triangles are not acutely pointed. The hind coxæ are very distinctive, being slightly wider at their outer than their inner margins; the tarsi, when viewed from the sides, appear to be moderately wide, but very thin from above or below. In *A. basalis*, the fifth segment of the abdomen is somewhat shorter than in the other species, but its tip is somewhat produced (although much less conspicuously so than in *Nematodes* and *Trigonopleurus*). The size and general appearance of all the species are suggestive of *Cardiophorus* of the *Elateridae*. Type-species, *A. flavipes*.

Second joint of antennæ (viewed from above) distinctly shorter

than third *flavipes*.

Second joint distinctly longer than third.

Elytra entirely reddish *rufipennis*.

Elytra reddish only about base *basalis*.

ARISOCEPHALUS FLAVIPES, n.sp.

Black; extreme apex and base of prothorax, apex of scutellum, and antennæ (basal joint darker) reddish, elytra (base, suture, and sides excepted) and undersurface (parts of abdomen paler) of a dingy reddish-brown, legs (hind coxæ excepted) flavous. Densely clothed with short, more or less upright pubescence, sooty on the head and prothorax, mostly paler elsewhere.

Head with crowded and rather small punctures; with a conspicuous median carina from near base almost to apex; antennary sockets bounded by a curved carina, the same joined in front to the side of the clypeal margining carina. Antennæ extending to about hind coxæ, second joint of antennæ (as viewed from above) somewhat shorter than third, third distinctly shorter than fourth, its apex somewhat produced to one side, fourth-eighth strongly serrate (almost pectinate), ninth-tenth less strongly so, eleventh distinctly longer than tenth. *Prothorax* not much wider than long, sides rather strongly rounded in front, hind angles feebly directed outwards, the carina on each acute and about once and one-half the length of the scutellum; with a rather feeble median line, altering at the base to a feeble carina; punctures crowded and small, becoming smaller and still more crowded on sides. *Scutellum* with moderately dense punc-

tures, and a feeble median carina. *Elytra* parallel-sided to about the middle, thence gently decreasing in width to apex; densely granulate-punctate throughout, but more densely about base than elsewhere; striation well-defined throughout. *Metasternum* with a rather wide, shining, median line, lightly impressed along its middle. Tip of *abdomen* rather densely granulate-punctate. Length, 5 mm.

Hab.—N.S.W.: Sydney (A. M. Lea); unique.

From some directions, the pubescence of the elytra appears to be as dark as that of the prothorax, but, from others, most of it is seen to be paler; the front, produced portion of each of the fifth-eighth joints of antennæ is not much shorter than the joint itself.

ARISOCEPHALUS RUFIPENNIS, n.sp.

Black; extreme apex and base of prothorax, elytra, abdomen (in places feebly infuscated), legs (hind coxæ and femora excepted), and antennæ red or reddish. Densely clothed with short pubescence.

Head with crowded and rather small punctures; with a conspicuous median carina traceable to near base, but not on to clypeus; antennary sockets each with a narrow margining carina from eye to side at apex of clypeus. Antennæ moderately long, second joint distinctly longer than third, and almost as long as fourth, fourth-tenth equal in length, but fourth-seventh wider and more strongly serrated than the ninth and tenth, eleventh almost as long as the ninth and tenth combined. *Prothorax* slightly more transverse, but otherwise much as in preceding species. *Elytra* parallel-sided to beyond middle, with dense punctures about base, becoming less crowded (but quite sharply defined) elsewhere; striation lightly impressed and, in places, scarcely traceable. Length, 5 mm.

Hab.—Tasmania: Southport (John O. Dawson); unique.

In general appearance close to the preceding species, but elytra more brightly coloured, and with different punctures and striæ, second and third joints of antennæ differently proportioned, the following ones much less conspicuously serrated, and the median line on the metasternum less conspicuous. The clothing on the

pale parts is somewhat stramineous; on the dark parts, it is darker. In this and the following species, the hind coxæ at the sides are a trifle longer than the second abdominal segment; in the preceding species, they are of exactly the same length.

ARISOCEPHALUS BASALIS, n.sp.

Black; basal fifth of elytra reddish, tibiæ reddish, femora and coxæ darker, tarsi paler, antennæ dull reddish-brown, second and third joints and the tips paler. Clothed with very short and mostly stramineous pubescence.

Head with crowded and rather small punctures; with a conspicuous median carina from base to apex, an oblique carina on each side of clypeus from apex to base, where they almost touch the median line between the antennary sockets. Antennæ not very long, second joint short but distinctly longer than third, the two combined slightly longer than fourth, fourth-tenth equal in length, but decreasing in width from the sixth, and rather feebly serrated, eleventh about once and one-half the length of tenth. *Prothorax* much as in *A. flavipes* except that the punctures are smaller. *Elytra* parallel-sided to about the middle; with rather dense, well-defined punctures, becoming crowded at base; striation fairly well-defined. *Abdomen* with fifth segment somewhat produced at apex, and densely granulate-punctate there. Length, $3\frac{1}{2}$ mm.

Hab.—N.S.W.: Galston (A. M. Lea); unique.

The third joint of the antennæ, although very short, is not "excessively minute" as in *Entomophthalmus*; and the fourth joint, although somewhat larger than the fifth, is scarcely longer. The carination of the head is more pronounced than in the other species of the genus, and is much as on *Arisus carinaticeps*.

FORNAX NIGER, n.sp.

Black. Clothed with short, depressed pubescence, paler about base of prothorax and of elytra than elsewhere.

Head with crowded subasperate punctures; with a feeble longitudinal carina, and a conspicuous interocular one. Antennæ moderately long, first joint about as long as three following combined, second shorter than third, and third than fourth, fourth-

tenth equal in length, eleventh somewhat longer. *Prothorax* with front angles somewhat rounded, sides thence parallel to base; with punctures as on head; median line well defined towards base, but feeble in front. *Elytra* with crowded, asperate punctures about base, becoming less crowded and more sharply defined posteriorly; striation distinct throughout. Hind *coxae* evenly and strongly narrowed to sides, greatest length about equal to that of second abdominal segment; basal joint of hind tarsi about as long as the rest combined. Length, $4\frac{1}{2}$ mm.

Hab.—W.A.: Mount Barker (R. Helms); unique.

In general appearance, strikingly close to *F. suturalis*, but readily distinguished by the comparative lengths of the third and fourth joints of antennæ. The pubescence on the under-surface appears ashen or blackish according to the point of view; on the upper surface, it is almost entirely dark.

FORNAX CASTANEUS, n.sp.

Castaneous, tarsi somewhat paler. Densely clothed with short, stramineous pubescence.

Head strongly convex; with crowded but rather small punctures; inter-antennary carina not continued beyond antennary sockets. Antennæ not very long, second joint slightly longer than fourth, third almost as long as fourth and fifth combined, fourth-tenth subquadrate, fourth and fifth short, but combined considerably longer than sixth, sixth to tenth subequal, eleventh distinctly longer. *Prothorax* with sides rounded in front, thence almost parallel-sided to base; with dense and sharply-defined but rather small punctures, becoming crowded on sides. *Elytra* parallel-sided to near apex; base with crowded subasperate punctures, becoming smaller and more sharply defined posteriorly; striation well-defined. Hind *coxae* strongly and evenly narrowed to sides, which are very short, greatest length slightly more than that of second abdominal segment; basal joint of hind tarsi distinctly shorter than the rest combined, fourth slightly narrower than third, and scarcely produced on lower surface. Length, 6 mm.

Hab.—N.S.W.: Sydney (A. J. Coates).

In general appearance, strikingly close to some of the larger specimens, that I have referred, with doubt, to *P. parvulus*, but the fourth and fifth joints of antennæ, although short, are (combined) distinctly longer than the sixth; the hind tarsi are somewhat aberrant for the genus.

A smaller ($4\frac{3}{4}$ mm.) specimen from Queensland (Dalby, Mrs. F. H. Hobler) appears to belong to the species, but is more lightly coloured, with a vague remnant of a median line on the prothorax (completely absent from the type) and with slightly shorter antennæ and legs.

FORNAX MAJORINUS, n.sp.

Dark castaneous-brown, antennæ and legs paler. Very densely clothed with rather short, stramineous pubescence.

Head with dense but not very large punctures; inter-antennary carina widely interrupted in middle. Antennæ moderately long, second joint slightly longer than fourth, third almost as long as fourth and fifth combined, fourth slightly shorter than fifth, and fifth than sixth, sixth-tenth subequal in length, eleventh almost as long as ninth and tenth combined. *Prothorax* with sides strongly rounded in front, thence parallel-sided to base; punctures dense, rather small and subasperate, becoming crowded on sides. *Elytra* parallel-sided to beyond the middle; with dense asperate punctures about base, becoming smaller posteriorly; striation well defined. Hind *coxae* produced to points at the sides, greatest length distinctly more than that of second abdominal segment; hind tarsi with basal joint as long as the rest combined. Length, $8\frac{1}{4}$ mm.

Hab.—N.S.W.: Byron Bay (C. Watson); unique.

A comparatively large, robust species.

DYSTRIGONISTHIS LATICOLLIS, n.sp.

Of a rusty-castaneous, appendages somewhat paler. Densely clothed with short, rusty pubescence.

Head with rather coarse, crowded punctures; clypeus shallowly concave. Antennæ with second joint short, third about as long as fourth and fifth combined, fourth-eighth subequal in length and with rounded sides, ninth almost as long as three preceding

combined, slightly shorter than eleventh and slightly longer than tenth. *Prothorax* with sides strongly rounded in front, and then increasing in width to base, extreme base distinctly wider than elytra, and about twice the width of apex, with a rather feeble median line disappearing before apex; with very dense, and moderately large, round punctures; with a small, round fovea on each side, close to middle of base. *Elytra* parallel-sided to beyond the middle, base densely granulate-punctate, elsewhere with fairly dense but smaller and more sharply defined punctures; striation well-defined, first and second striae on each elytron opening out into a short, deep, oblique sulcus close to apex. Hind *coxae* with greatest length about equal to that of second abdominal segment, obliquely decreasing to each side, which is about one-third the greatest length. Length, 15 mm.

Hab.—N.S.W.: Mount Irvine (Dr. E. W. Ferguson); unique.

The prothoracic punctures, although dense, are quite sharply-defined on the disc; on the sides, they are more crowded and irregular. From some directions, the basal fifth of the elytra appears to be closely covered with fine, transverse corrugations. The three, long, terminal joints of antennae are suggestive of (the Australian species of) *Dyscolocerus*, but the deep, lateral channels of the prosternum at once exclude it from that genus.

It is with some doubt that I refer this and the following species to *Dystrigonisthis*, with which, however, they would certainly be associated in Blackburn's Table; the antennae of the two species differ considerably from each other, and also from those of *D. paradoxus*, and, in other families of beetles, these differences would almost certainly be regarded as of generic importance; but as Bonvouloir, and other workers at the family, have allowed an even greater range of variation in the antennae, it does not appear desirable to propose a new genus (or new genera) for them at present. The lateral channel on each side of the prosternum is deep and conspicuously closed posteriorly (and receives the antenna throughout its length); on the basal third of the inner side, it is distinctly carinated, but, from the basal third to its front margin, the side is gently rounded, without the least trace of a carina. Although Blackburn separated *Dystrigonisthis*

from *Phænocerus* by the former having "Prosternal sulcus margined within by an elevated line only in its hinder part" as against "a continuous elevated line," it is to be noted that Bonvouloir says of *Phænocerus* "*Sillon-marginal . . . étant bordé en arrière intérieurement par une ligne élevée.*" Quite possibly the following species should have been referred to *Phænocerus*, but it is evidently distinct from *P. subclavatus* by its larger size, and different antennæ and hind coxæ.

DYSTRIGONISTHIS FERRUGINEUS, n.sp.

Dark rusty-castaneous, appendages somewhat paler. Densely clothed with short, rusty-red pubescence.

Head with crowded punctures of moderate size; with a short and rather wide median line; clypeus shallowly concave. Antennæ rather stout, second joint short, third cylindrical, almost as long as the three following combined, fourth-eighth short, subequal and distinctly transverse, ninth and tenth somewhat longer and wider (and with small foveæ at apex), eleventh about as long as the three preceding combined. *Prothorax* with sides rather strongly rounded in front, and then obliquely increasing in width to near base, which is somewhat wider than elytra, and almost twice the width of apex; with dense punctures of moderate size, smaller in middle than elsewhere, and becoming crowded on sides. *Elytra* feebly decreasing in width from base; densely granulate-punctate about base, punctures becoming smaller and sparser posteriorly; striation as in preceding species. Hind coxæ with greatest length about equal to that of second abdominal segment, curvilinearly decreasing to sides, which are very short; basal joint of hind tarsi somewhat shorter than the rest combined; second, third, and fourth regularly decreasing in length and width, fourth not bilobed and scarcely produced on under surface. Length, 11-12½ mm.

Hab.—Tasmania: Hobart (A. M. Lea).

The antennæ so regularly increase in width, that the three apical joints can scarcely be regarded as forming a club; from above, the second joint appears to be slightly shorter than the fourth; but, from below, it is seen to be slightly longer. The

general outlines of the prothorax and elytra are much as figured for those of *Phenocerus subclavatus* (Bonv., Mon., Pl. xiii., fig. 1).

On one specimen, the eighth and ninth joints of each antenna appear to be combined to form but one (with the suture completely obliterated in places); but, as the antennæ of the type are normal, this would appear to be accidental. On this specimen, also, there is a short, shining, median line, and two, small, medio-discal foveæ on the pronotum (quite absent from the type).

PHENOCERUS CLAVICORNIS, n sp.

Black, antennæ and legs somewhat obscurely diluted with red, tarsi paler. Rather densely clothed with short, ashen pubescence.

Head with small, crowded, partially concealed punctures, inter-antennary carina not continued across middle. Antennæ stout and not very long, first joint as long as the three following combined, second short, third slightly longer than fourth and fifth combined, fourth slightly longer than fifth, fifth-eighth short and transverse, ninth-eleventh forming a conspicuous club, ninth and tenth each conspicuously wider and longer than eighth, eleventh as wide as tenth at base, but rapidly narrowing to apex. *Prothorax* with sides strongly rounded in front, thence parallel-sided to base, with a slight but almost continuous median line; with dense and rather small, but sharply defined punctures, becoming crowded on sides. *Elytra* feebly diminishing in width from near base; densely granulate-punctate about base, elsewhere with small but sharply defined punctures; striation well-defined throughout. Hind *coxae* at sides about one-third their greatest length, this slightly more than that of second abdominal segment; basal joint of hind tarsi about as long as the two apical joints combined. Length, $7\frac{1}{4}$ mm.

Hab.—Tasmania: Hobart (A. M. Lea); unique.

The antennæ have a distinctly three-jointed club, a character which excludes the species from all the genera noted by Bonvouloir, except *Phenocerus*; but the club is even more distinct than as figured for *P. subclavatus*; from the description of that species, also, it differs in being somewhat smaller, much darker, and prothorax with a conspicuous median line. In Blackburn's

Table, *Phænocerus* is placed with three other genera distinguished by having "Prosternal sulcus margined within by a continuous elevated line." This, however, is not the case with the present species, whose lateral channel is carinated on the posterior half, but gently rounded in front; its posterior end is also open.

GALBA* AUSTRALIÆ, n.sp.

Black, appendages reddish. Densely clothed with golden pubescence, becoming golden-red in places; on the undersurface somewhat ashen.

Head with crowded punctures mostly concealed, but more distinct on clypeus than elsewhere; with a very thin, median carina from base almost to apex. *Antennæ* rather short, second joint short, curvilinearly triangular, third-tenth each with a long ramus, that of third somewhat shorter and thicker than the others; eleventh joint slightly longer and thicker than the ramus of the tenth. *Prothorax* gibbous, not much wider than long, sides rounded in front, thence almost parallel to base; disc with irregularly granulate (in places vermiculate) elevations; the sides with irregular, more or less concealed punctures. *Elytra* narrowed from base to apex, tips obliquely carinated and produced; with series of fairly large punctures, becoming smaller posteriorly, but close to apex becoming larger. Hind *coxæ* with posterior edge somewhat sinuous, outer edge quite as long as elsewhere; tarsi with second, third, and fourth joints each with a wide and conspicuous lamella. Length, 11-14 mm.

Hab.—Queensland: Coen River (H. Hacker).

The first of its genus† to be recorded by name from Australia, although Bonvouloir (Mon., p.807) stated that the genus occurs there; Blackburn, however, thought‡ that this may have been due to confusion with *Galbodema*, there recorded as a synonym of *Galba*, but elsewhere (Mon., p.442) treated as distinct. The beautiful pubescence on the whole of the upper surface has a

* Guér.-Men., Voy. Coq., Entom., p.68; Bonv., Mon., p.806.

† Readily recognisable by the large size and robust form of its species, with three tarsal joints conspicuously lamellate.

‡ Manuscript note.

curious waved or mottled appearance, due to the varying directions in which it is applied to the derm; thus, the elytra, when viewed from behind, appear to have two golden fasciæ alternated with brownish ones; on altering the point of view, the brownish ones become golden, and *vice-versâ*, whilst, from other directions, the clothing appears to consist of irregularly mixed golden and brownish spots. The third joint of the antennæ is about as long as the two following combined, and its ramus is slightly shorter than the first joint, the rami of the other joints being slightly longer and subequal *inter se*. The elevations on the prothorax may be regarded as forming an irregularly lobed mass, of which the median lobe is the most conspicuous, appearing as an abrupt, obtusely pointed elevation near the scutellum (from the sides, its posterior end appears vertical), then, towards the middle, it bifurcates, each arm being irregularly continued to near the apex; on each side of it there are two other elevations feebly connected with it, the front one somewhat oval, the back one concave inwards and almost right-angled outwards; of the species figured by Bonvouloir, the nearest approach to this structure is that of *G. wallacei* (Pl. xl., fig. 1), but the elevations are all somewhat different; they are clothed with more ruddy pubescence than on the adjacent parts. The rows of elytral punctures are in very feeble striæ, but, about the tip, the striæ become deep; the derm is densely covered with minute punctures, but these become visible only after abrasion; the sides of the elytra, from the base of the fifth abdominal segment, are obliquely flattened, so as to appear as enlargements of the (elsewhere extremely narrow) epipleuræ, with the upper edge acutely ridged, and, at the suture, rather acutely produced.

PYTHIDÆ.

NOTOSALPINGUS BRUNNEUS, n.sp.

Obscure piceous-brown, basal half of antennæ and legs somewhat paler. Clothed with short and sparse but fairly distinct pubescence, more noticeable about apex of elytra than elsewhere.

Head wide and gently convex, with two shallow depressions in front, separated by a short, shining space; with crowded, sharply

defined punctures. Antennæ rather thin, extending to base of prothorax, slightly dilated to apex. *Prothorax* lightly transverse, sides regularly increasing in width from base to near apex, and then rather abruptly narrowed, on apical half with several very feeble denticulations; with dense and moderately coarse punctures, more crowded on sides than on middle. *Elytra* at base slightly wider than head across eyes, shoulders square, sides subparallel or feebly dilated to near apex, and then widely rounded; with distinct rows of fairly large punctures, larger and more irregular about base than elsewhere, and becoming rather small posteriorly. Length, $1\frac{1}{2}$ -2 mm.

Hab.—Tasmania: Hobart, Launceston, Bruni Island.—Western Australia: Swan River, Newcastle (A. M. Lea).

A depressed, densely punctate species, readily distinguished from all others of the genus by the uniformly dingy-brown elytra. The apical joints of the antennæ are gradually enlarged, not abruptly clavate as in *Neosalpingus*. The denticulations on the sides of the prothorax are so very feeble that, from most directions, they are quite invisible; one specimen has a shining median line on the basal half of the pronotum; and, on several, there are two vague basal depressions; the elytra are without striæ, although their punctures are in very evident rows.

TASMOSALPINGUS, n.g.

Head wide, obtusely produced in front. Eyes small, lateral, prominent and coarsely faceted. Antennæ inserted considerably in front of eyes; with a conspicuous, three-jointed club. *Prothorax* wide, sides acutely margined. *Scutellum* small and strongly transverse. *Elytra* short. *Metasternum* elongate. *Legs* not very long; front coxæ rather widely, the others moderately separated, front coxal cavities open behind; tibiæ dilated towards, and minutely spurred at apex; tarsi moderately long, two basal joints of hind pair and three of the others moderately wide and close together, penultimate small and simple, claw-joint rather stout, almost as long as the rest combined; claws swollen towards base but not dentate.

The acutely carinated margins of prothorax, each separated by

a narrow gutter from the disc, and rather widely separated front coxæ, readily distinguish the genus from *Notosalpingus*, to which, at first glance, the two species appear to belong. Type of genus, *T. quadrispilotus*.

TASMOSALPINGUS QUADRISPILOTUS, n.sp.

Brassy-black; undersurface, legs, and antennæ (club excepted) paler, elytra piceous-brown, with four, large, pale spots. Head and prothorax with distinct but somewhat straggling pubescence, elytra glabrous.

Head obliquely flattened, as wide across eyes as length of antennæ, with a shallow depression on each side in front; punctures dense and sharply defined but not very large, becoming smaller in front. Antennæ with second joint almost as stout as first but distinctly shorter, third-eighth small. *Prothorax* at widest (which is near the apex) slightly wider than head, apex distinctly wider than base, each side of base distinctly impressed, margins rather acutely carinated throughout but incurved at base; punctures much as on head. *Elytra* at base about the width of prothorax at its widest, feebly dilated to beyond the middle and then widely rounded; with rather coarse punctures in distinct but irregular series near base, becoming smaller and irregularly disposed elsewhere. Length, $1\frac{1}{2}$ - $1\frac{3}{4}$ mm.

Hab.—Tasmania: Mount Wellington, in moss; Launceston (A. M. Lea).

A short, dumpy species, with prothorax rather conspicuously clothed, and elytra glabrous. On the type, the first spot on each elytron is a large, irregular one, commencing on the shoulder and obliquely directed towards the suture, near which it terminates at the basal third; the second one commences just beyond the middle, and is obliquely subtriangular. On one specimen, the pale markings are considerably enlarged, so that they appear to be the ground-colour, with the infuscate portions marginal, sutural, and forming three, large, median spots; the smaller one, on the suture, narrowly connected with the others, and these connected with the marginal infuscation.

TASMOSALPINGUS PROMISCUUS, n.sp.

Dark piceous-brown, antennæ (club excepted) and legs slightly paler, elytra with obscurely flavous markings. Head and prothorax with rather conspicuous pale pubescence, elytra glabrous. Length, $1\frac{1}{2}$ - $1\frac{3}{4}$ mm.

Hab. — Tasmania: Hobart, Swansea (A. M. Lea).

Structurally, close to the preceding species, but elytral punctures distinctly smaller and nowhere seriate in arrangement. The elytral markings, although conspicuous, are not sharply defined, and consist, on each elytron, of a humeral spot, lightly or not at all connected with a small subsutural one at the basal third; and a larger, post-median spot, fairly wide near the suture, and strongly narrowed obliquely upwards and outwards.

NEOSALPINGUS BREVIS, n.sp.

Black, appendages (club excepted) obscurely paler; head and prothorax with a slight bluish or greenish gloss.

Head wide, gently convex between eyes, and somewhat flattened in front, with very minute punctures. Eyes very widely separated, and almost basal. Antennæ moderately long, third-eighth joints small, the three following forming an abrupt and conspicuous club. *Prothorax* widely transverse, rather strongly convex; base and apex of subequal width, sides rounded, and each with four, small, unisetose denticulations, each side of base with a small depression; with numerous, small but rather sharply defined punctures, becoming somewhat crowded and larger on sides. *Elytra* short, at base slightly wider than prothorax, sides distinctly dilated to about the middle, and then widely rounded to apex; smooth and apparently impunctate. Length, 1 - $1\frac{1}{4}$ mm.

Hab. — Queensland: Cairns (Macleay Museum, and E. Allen).

In general appearance, like small, dumpy specimens of *N. politus*, but prothoracic punctures considerably smaller, basal impressions smaller and oblique, head smoother, and elytra considerably more dilated. The upper surface is entirely glabrous, the undersurface almost so. The head, when seen from the front, appears to be of subtriangular shape, but with sinuous sides; the

elytra might fairly be regarded as impunctate, as the punctures are so extremely small that it is only from certain directions, and in a good light, that they may be seen under a Coddington lens.

CURCULIONIDÆ.

CYROTYPHUS VARIEGATUS, n sp.

Black, parts of tarsi obscurely diluted with red. Densely clothed with variegated, depressed pubescence or setæ, the elytra with numerous, small fascicles.

Head and base of rostrum with dense, normally concealed punctures of moderate size, apical half of rostrum with small, dense punctures. *Antennæ* moderately long, third joint twice the length of second, and distinctly longer than fourth, eleventh about once and one-half the length of tenth. *Prothorax* about as long as basal width, which is considerably more than that of apex, sides bisinuate, with an irregular ridge on each side of middle, rising into a small tubercle near base, each side with a feeble, granulate elevation; with dense, more or less concealed punctures, and a few scattered granules. *Elytra* much wider than prothorax, almost parallel-sided to near apex, each elytron with two obtuse ridges near base, the inner one moderately elevated about summit of apical slope; with small, distinct granules about base, but other granules, and dense punctures, normally concealed. *Femora* stout, rather lightly but distinctly dentate. Length, 13 mm.

Hab.—Tasmania (J. E. Philp); unique.

Readily distinguished from *C. fasciculatus*, by the prothorax being without a conspicuous, transverse series of four tubercles; the elytra also are much more conspicuously variegated. The apical half of the rostrum is glabrous, but all other parts are more or less densely clothed, the pubescence being mostly stramineous, but varying to white (there is a conspicuous, bisinuate, white mark traversing the suture slightly beyond the middle) and black; on the elytra, there are numerous, small fascicles (especially along the suture), all of which are black; the abdomen has a vaguely striped appearance.